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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,791	03/24/2004	Felipe O. Simoes	555255012725	4249

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EXAMINER

HUYNH, NAM TRUNG

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/807,791

Applicant(s)

SIMOES ET AL.

Examiner

Nam Huynh

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

This office action is in response to amendment filed on 5/18/2006. Of the original claims 1-34, claims 1, 16, 20, and 31 have been amended.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5-18, 20-21, 25, and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Bo et al. (US 6,265,845).

A. Regarding claim 1, Bo et al. discloses a portable battery charger having a separate battery pack (title) comprising the following:

- A charging housing (charging unit) (figure 3, item 10) that comprises a plane surface (base wall) (figure 2, item 141f) with a mounting space (receptacle) defined in the base wall. The charging unit also comprises an interface connector (electrical contact) (figure 9, item 160d) located inside the mounting space. The intended use of the invention is to charge or recharge a battery pack using an external power supply (input voltage) as can be seen in figure 14B. Therefore, a power converter is inherent since it is well known in the art that the voltage required for charging a battery differs from an external power supply such as a wall outlet.

Art Unit: 2617

- Electrical contacts (output assembly) (figure 7, items 140a~d) for charging a battery.
- A charging unit (first input assembly) that is removable from the mounting space (receptacle) of the charging housing (figure 8). The charging unit has a top surface (front face) (figure 8, item 205) that comprises an interface connector (electrical contact) (figure 8, item 252) for mating (facing) with the interface connector of the charging housing (figure 9, item 160d) when installed into the mounting space.
- An electrical connection device comprising a first connector (figure 13A, item 30) for connection with the charging unit (input assembly), a second connector (plug) for connection to the power supply of a wall, and a power cord (figure 13A, item 34).

B. Regarding claim 2, Bo et al. discloses a first connector (second input assembly) (figure 13A, item 30) for connection with the charging unit (first input assembly).

C. Regarding claim 5, Bo et al. discloses electrical contacts (figure 7, items 140a~d) that is associated with the charging unit and is configured to charge at least one battery of a mobile device (figure 7, items 410,420).

D. Regarding claim 6, Bo et al. shows in figure 7 a mobile station (item 400) with the battery connected and a separate battery pack (item 420) docked to the charging housing.

E. Regarding claim 7, Bo et al. discloses a charging housing with an interface connector (socket) (figure 8, item 160d) in which the charging unit detachably mates with.

F. Regarding claims 8-11, 17-18, 21, and 28, Bo et al. discloses a locker (figure 9, item 145) (latching mechanism) for removable latching the charging unit with the charging housing. A locker slot (figure 8, item 201a) is configured to receive the locker, which comprises an arm as seen in figure 8.

G. Regarding claims 12 and 15, when the electrical connector in figure 13A is connected to the charging unit, a power cord, adapter, and plug is integrated and are configured to mate together.

H. Regarding claim 13, the intended use of the invention is to charge or recharge a battery pack using an external power supply (input voltage) as can be seen in figure 14B. Therefore, a power converter is inherent since it is well known in the art that the voltage required for charging a battery differs from an external power supply such as a wall outlet.

I. Regarding claim 14, an input source is shown in figure 14B.

J. Regarding claims 16, 20, and 31, the limitations are rejected as applied to claim 1. Furthermore, when the charging unit is connected to the charging housing in the manner shown in figure 8, the charging unit would define a "base wall". The top surface (front face) (figure 8, item 205) would be hidden from view when installed.

K. Regarding claim 25, Bo et al. shows vertical guide grooves (figure 8, item 202c) for guiding the charging unit into the charging housing.

L. Regarding claims 29-30, Bo et al. shows in one embodiment of the invention a push button (figure 3, item 143) to release the charging unit from the charging housing. A push button may be considered a "plunger" since it is pushed in a downward motion.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 3-4, 19, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bo et al. (US 6,265,845) in view of Huang (US 2002/0115480).

A. Regarding claims 3-4, 19, and 32-33, Bo et al. discloses the limitations set forth in claims 1, 16, and 31, but does not explicitly disclose an output assembly consisting of a USB connector. Huang discloses an adapter set in which an embodiment consists of an output assembly for a data transmission cable from a computer or computer peripheral apparatus (figure 11, item 833). Furthermore, Huang discloses that data transmission cables can be USB connectors (column 2, paragraph 0024). Therefore it

would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the USB connectivity taught by Huang with the charger of Bo et al. in order to allow interface of the charger with a computer or computer peripheral apparatus.

B. Regarding claim 34, the limitations are rejected as applied to claim 1.

6. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bo et al. (US 6,265,845) in view of McKee et al. (US 4,893,351).

A. Regarding claim 22, Bo et al. discloses the limitations set forth in claim 20, but does not explicitly disclose that the locker (latching mechanism) comprises a pair of spring clips configured to engage a post defined in a receptacle. McKee et al. discloses a communication receiver with a latching receptacle and a connector cable with a mating plug (column 2, lines 30-39). In the scope of the invention, two spring members (spring clips) (figure 11, items 86, 88) are used to wrap around a mating plug (post) (figure 11, item 54). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the locker of Bo et al., to include the locking configuration of McKee et al., in order to securely lock the charging unit to the charging housing and allow the charging unit to be quickly removed when necessary.

B. Regarding claim 23, McKee et al. shows guide grooves (recess) (figure 9, item 58) in which the spring members latch on the mating plug.

C. Regarding claim 24, McKee et al. discloses a lever arm (figure 11, item 51) that when pushed in a downward direction or "plunging" direction, spreads the spring members apart which can be seen in figure 12.

7. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bo et al. (US 6,265,845) in view of Wei et al. (US 6,371,535).

A. Regarding claim 26, Bo et al. discloses the limitations set forth in claim 20 and the use of guide bars (figure 8, item 142a), but does not explicitly disclose detents that are used to engage spring biased ball bearings. Wei et al. discloses an easily releasable locking device for detachably securing a battery pack to a portable battery-powered apparatus (title). In the scope of the invention, spring loaded latching members (figure 3, items 23, 25) are configured to lock into detents of the engaging portion (figure 3, item 111). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the locker of Bo et al., to include the latching/locking configuration taught by Wei et al., in order to allow the charging unit to be easily attached and removed from the charging housing.

B. Regarding claim 27, although Bo et al. does not explicitly disclose an L shaped cross-section, it would have been further obvious to one of ordinary skill in the art to design the shape of the guide bars or structure in order to meet specification and design criteria.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP



§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam Huynh whose telephone number is 571-272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NTH  
8/16/06

  
GEORGE ENG  
SUPERVISORY PATENT EXAMINER